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United States Patent [19]

Cumming

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[54] **ACCOMMODATING INTRAOCULAR LENS**

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 915,453, Jul. 16, 1992, abandoned, which is a continuation-in-part of Ser. No. 515,636, Apr. 27, 1990, abandoned.

[51] **Int. Cl.**[6] **A61F 2/16**

[52] **U.S. Cl.** **623/6**

[58] **Field of Search** 623/6

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[57] **ABSTRACT**

An accommodating intraocular lens to be implanted within the natural capsular bag of a human eye from which the natural lens matrix has been removed through an anterior capsulotomy in the bag circumferentially surrounded by a capsular remnant. During a postoperative healing period following surgery, the anterior capsular remnant fuses to the posterior capsule of the bag by fibrosis about haptics on the implanted lens, and the lens is deflected rearwardly to a distant vision position against the elastic posterior capsule of the bag in which the posterior capsule is stretched rearwardly. After fibrosis is complete, natural brain-induced contraction and relaxation of the ciliary muscle relaxes and stretches the fused remnant and increases and reduces vitreous pressure in the eye to effect vision accommodation by the fused remnant, the posterior capsule, and vitreous pressure. A method of utilizing the intraocular lens in a human eye to provide the eye with accommodation and to enable utilization of a lens with a relatively large optic.

8 Claims, 13 Drawing Sheets